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 APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/623,154	07/21/2003		Takashi Takahashi	017498-0168	5200	
22428	7590	12/06/2005		EXAM	EXAMINER	
FOLEY AND LARDNER LLP				GRAY, JILL M		
SUITE 500 3000 K STRE	EET NW			ART UNIT	PAPER NUMBER	
	WASHINGTON, DC 20007			1774		

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/623,154	TAKAHASHI ET A	AL.				
Office Action Summary	Examiner	Art Unit					
	Jill M. Gray	1774					
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet w	vith the correspondence ac	ddress				
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perion.  - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the may be arrived patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN 1.136(a). In no event, however, may a od will apply and will expire SIX (6) MC tute, cause the application to become A	ICATION. The reply be timely filed PATHS from the mailing date of this capabandoned (35 U.S.C. § 133).	,				
Status							
1)⊠ Responsive to communication(s) filed on 23	August 2005						
	nis action is non-final.						
3) Since this application is in condition for allow		tters, prosecution as to the	e merits is				
,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	•	·					
4)⊠ Claim(s) <u>2-17</u> is/are pending in the application	on.						
4a) Of the above claim(s) is/are withd		2°					
5) Claim(s) is/are allowed.	rawn nom consideration.						
6)⊠ Claim(s) <u>2-4,7-12 and 17</u> is/are rejected.							
7)⊠ Claim(s) <u>5,6 and 13-16</u> is/are objected to.							
8) Claim(s) are subject to restriction and	l/or election requirement						
, , , , , , , , , , , , , , , , , , , ,	nor election requirement.						
Application Papers							
9) The specification is objected to by the Exami							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) ☐ The oath or declaration is objected to by the	Examiner. Note the attache	ed Office Action or form P1	TO-152.				
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreignal All b) Some * c) None of:	gn priority under 35 U.S.C.	§ 119(a)-(d) or (f).					
1. ☐ Certified copies of the priority docume	ents have been received.						
2. Certified copies of the priority docume		Application No.					
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
		÷					
Attachment(s)							
1) Notice of References Cited (PTO-892)		Summary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0		(s)/Mail Date Informal Patent Application (PT0	O-152)				
Paper No(s)/Mail Date 44. 05	6) Other:		,				

#### **DETAILED ACTION**

1. The indicated allowability of claims 2-4 is withdrawn in view of the newly discovered reference(s) to JP 07-157338. Rejections based on the newly cited reference(s) follow.

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 7 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent Publication JP 07-157338 (translation).

Claims 7 and 17 are product-by-process claims. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the product was made by a different process.

Accordingly, the examiner has interpreted claims 7 and 17 as being drawn to an optical fiber having an antireflection film on the end surface. JP 07-157338 teaches in the translation an optical fiber having an antireflection film formed on the end surface.

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Therefore, the teachings in JP 07-157338 anticipate the invention as claimed in present claims 7 and 17.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Publication JP 07-157338 (translation) in view of Japanese Patent Publication JP 07-294706 (translation), as applied in the previous Office Action.

JP 07-157338 is as set forth above but does not teach that the antireflection film is a fluorine-containing compound or that the film is even or uneven. JP 07-294706 is as set forth previously and teaches a method for forming antireflection films on optical articles, said method comprising dipping the article in a fluororesin solution and pulling up with said fluororesin solution and controlling the speed. See page 4. In addition, JP 07-294706 teaches that the coating can be even or uneven as required by claims 9-10. The teachings of JP 07-294706 would have provided motivation to the skilled artisan to use a fluororesin as the antireflection coating of JP 07-157338 because of its low refractive index, per claim 8. See page 4 of JP 07-294706.

5. Claims 2-4 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Publication JP 07-294706 (translation) as applied above to

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claims 8-10 in view of Japanese Patent Publication JP 07-157338 (translation), as applied above to claims 7-10 and 17.

JP 07-294706 is as applied above to claims 8-10 and teaches a method for forming antireflection films on optical articles, said method comprising dipping the article in a fluororesin solution and pulling up with said fluororesin solution and controlling the speed, as required by claims 2-4 and 11-12, but does not specifically teach optical fibers as the substrate. JP 07-157338 is as applied above to claims 7 and 17 and teaches optical fibers having an antireflection coating on the end surfaces. Though JP 07-294706 is silent as to optical fibers as the substrate, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the process of JP 07-294706 to an optical fiber substrate as taught by JP 07-157338 with reasonable expectation of obtaining an optical fiber having an antireflection coating on the end surfaces thereof.

### Allowable Subject Matter

6. Claims 5-6 and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primary Examiner Art Unit 1774

jmg